

WINCHESTER MUNICIPAL UTILITIES
PIPE EVALUATION MODEL
SANITARY SEWER GRAVITY INVENTORY DATA SHEET

Street/Roadway Name: _____

Address Range: _____

Cross Street Range: (if applicable) _____

From Manhole # _____ To Manhole # _____

1. Installation Date: _____

2. Main Purpose:
Collector _____
Trunk _____
Interceptor _____

3. Main Type:
Gravity _____
Force Main _____

4. Pipe Size (inches): _____

5. Replacement of Segment Length: _____

6. Number of Manholes: _____

7. Material Type:
Vitrified Clay Pipe (VCP) _____
PVC _____
ABS Truss Pipe _____
Reinforced Concrete Pipe _____
Orangeburg Pipe _____
Lined Cast Iron _____
Unlined Cast Iron _____
Lined Ductile Iron _____
Wood _____

8. Number of Customer Connection:
Residential _____
Commercial _____
Industrial _____
Institutional* _____

*Churches, Schools, Government Buildings, Rest/Nursing Homes

9. Potential for Bypass/Surcharge (public health safety)
High _____
Medium _____
Low _____

10. Potential for Inflow
High _____
Medium _____
Low _____

11. Depth of Existing Sewer Adequate for Existing Connections
No _____
Yes _____

12. Institutional Facility Location
Within Project Area _____
Within 500 ft. of Project Area _____
Greater than 500 ft. Outside Project Area _____

13. Historical Blockage Frequency (HBF)*:
HBF > 10 _____
HBF 2 – 10 _____
HBF < 2 _____

*Historical Blockage Frequency = Number of Blockages/100 ft. of Pipe/Year

14. Pipe Failure Potential (PFP):
High _____
Medium _____
Low _____

15. Jet Rod Ability:
No _____
Yes _____

16. Customer Connections/100 ft.:
≥ 4 Customer Connections/100 ft. _____
3 Customer Connections/100 ft. _____
≤ 2 Customer Connections/100 ft. _____

17. Total Opinion of Cost:
≤ \$50,000.00 _____
\$50,000 – 125,000 _____
≥ \$125,000 _____
(Item 17 to be filled out by Eng. Dept.)

18. Roadway Classification

Residential

Collect or

Arterial

19. Roadway Maintenance

City, County

State

20. Project Location

Roadway Right-of-Way

Rear Yard

21. Easement/Right-of-Way

Yes

No

Inventory Data Sheet Completed (Date): _____

By: _____

WINCHESTER MUNICIPAL UTILITIES
EVALUATION MODEL
SANITARY SEWER GRAVITY REPLACEMENT PROGRAM

Street/Roadway Name: _____

Address Range: _____

Cross Street Range: (if applicable) _____

From Manhole # _____ To Manhole # _____

Criteria	Point Value	Rating
Physical Data		
1. Age (Service Life – 50 Years)		_____
> 50 Years	10	
40-50 Years	8	
30-40 Years	6	
20-30 Years	4	
0-20 Years	0	
2. Purpose/Type		_____
Collector	10	
Trunk	7	
Interceptor	4	
3. Pipe Size		_____
< 8-inch diameter	10	
8-inch diameter	5	
> 8-inch diameter	0	
4. Material Type		_____
Orangeburg, Wood	10	
Unlined Cast Iron	7	
Vitrified Clay Pipe (VCP)		
Lined Cast Iron, Reinforced Concrete	3	
Lined Ductile Iron, ABS Truss Pipe, PVC	0	

Level of Service

5. Potential for Bypass/Surcharge (public health safety)		_____
High	10	
Medium	5	
Low	0	

6. Potential for Inflow		_____
High	10	
Medium	5	
Low	0	

7. Depth of Existing Sewer Adequate for Existing Connections		_____
No	10	
Yes	0	

8. Institutional Facility Location		_____
Within Project Area	10	
Within 500 ft. of Project Area	5	
Greater than 500 ft. Outside Project Area	0	

Maintenance History

9. Historical Blockage Frequency (HBF)*		_____
HBF > 10	10	
HBF 2-10	5	
HBF < 2	0	

* Historical Blockage Frequency = Number of Blockages/100 ft. of Pipe/Year

10. Pipe Failure Potential		_____
High	10	
Medium	5	
Low	0	

11. Jet Rod Ability		_____
No	10	
Yes	0	

Cost Factors

12. Customer Connections/100 ft.		_____
≥ 4 Connections/100 ft.	10	
3 Connections/100 ft.	7	
≤ 2 Connections/100 ft.	3	

13. Total Opinion of Cost		_____
≤ \$50,000	10	
\$50,000 - \$125,000	5	
≥ \$125,000	0	

Constructability

14. Roadway Classification		<hr/>
Residential	10	
Collector	5	
Arterial	0	
15. Roadway Maintenance		<hr/>
City, County	10	
State	0	
16. Project Location		<hr/>
Roadway Right-of-Way	10	
Rear Yard	0	
17. Easement/Right-of-Way		<hr/>
Yes	10	
No	0	
	Total	<hr/>

WINCHESTER MUNICIPAL UTILITIES
PROJECT PRIORITIZATION
SANITARY SEWER GRAVITY REPLACEMENT PROGRAM

Street/Roadway Name: _____

Address Range: _____

Cross Street Range: (if applicable) _____

Criteria	Rating	X	Importance Factor	=	Priority Points
Physical Data					
1. Age	_____		<u>2</u>		_____
2. Purpose/Type	_____		<u>1</u>		_____
3. Pipe Size	_____		<u>4</u>		_____
4. Material Type	_____		<u>3</u>		_____
Level of Service					
5. Bypasses/Surcharges	_____		<u>10</u>		_____
6. Potential for Inflow	_____		<u>10</u>		_____
7. Depth	_____		<u>7</u>		_____
8. Institutional Facilities	_____		<u>3</u>		_____
Maintenance History					
9. Historical Blockage Freq.	_____		<u>5</u>		_____
10. Pipe Failure Potential	_____		<u>15</u>		_____
11. Jet Rod Ability	_____		<u>10</u>		_____
Cost Factors					
12. Customer Connections	_____		<u>5</u>		_____
13. Project Cost	_____		<u>15</u>		_____
Constructability					
14. Roadway Classification	_____		<u>1</u>		_____
15. Roadway Maintenance	_____		<u>2</u>		_____
16. Project Location	_____		<u>3</u>		_____
17. Easement/Right-of-Way	_____		<u>4</u>		_____
Total Points			<u>100</u>		_____